

Fig. 1

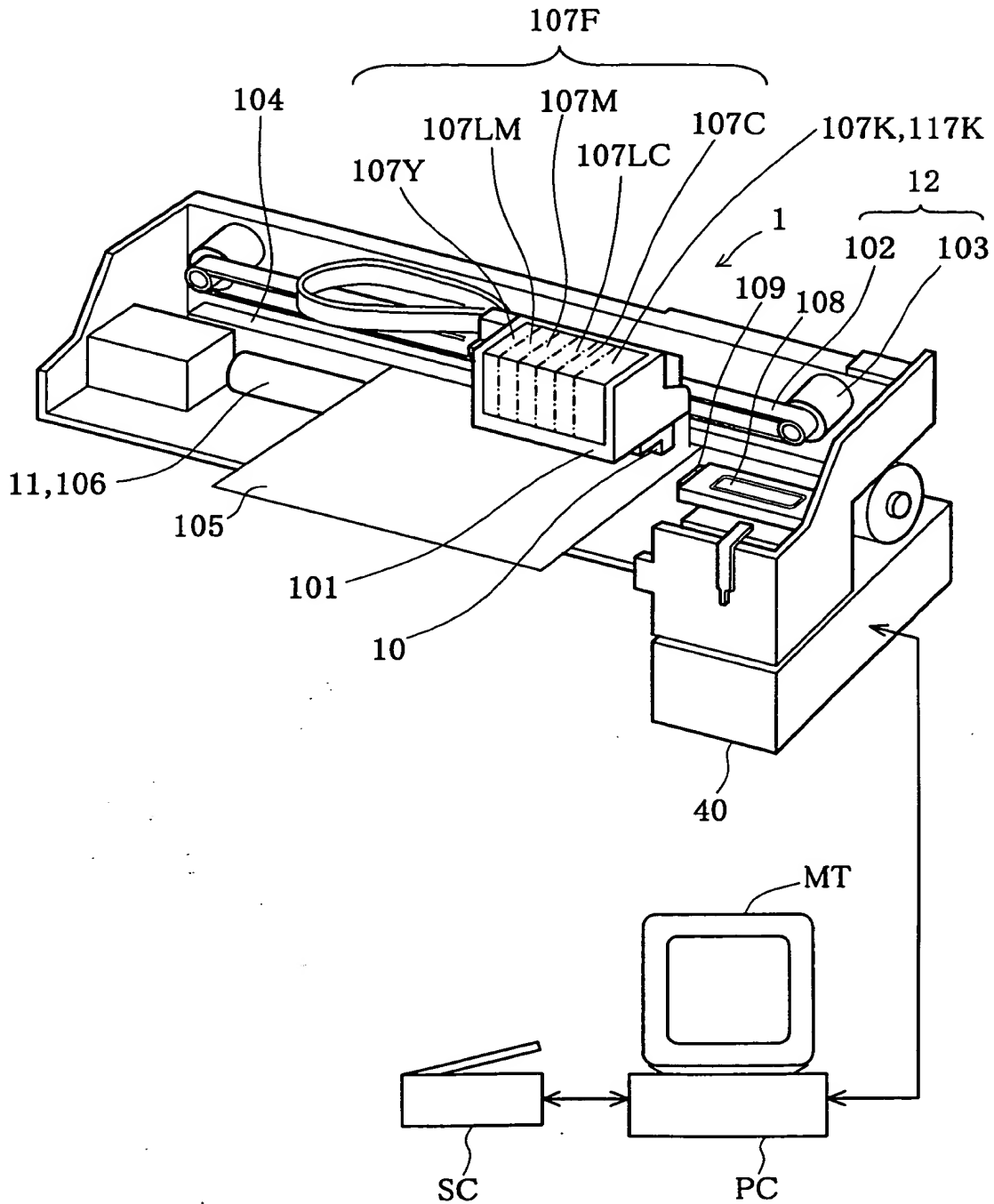
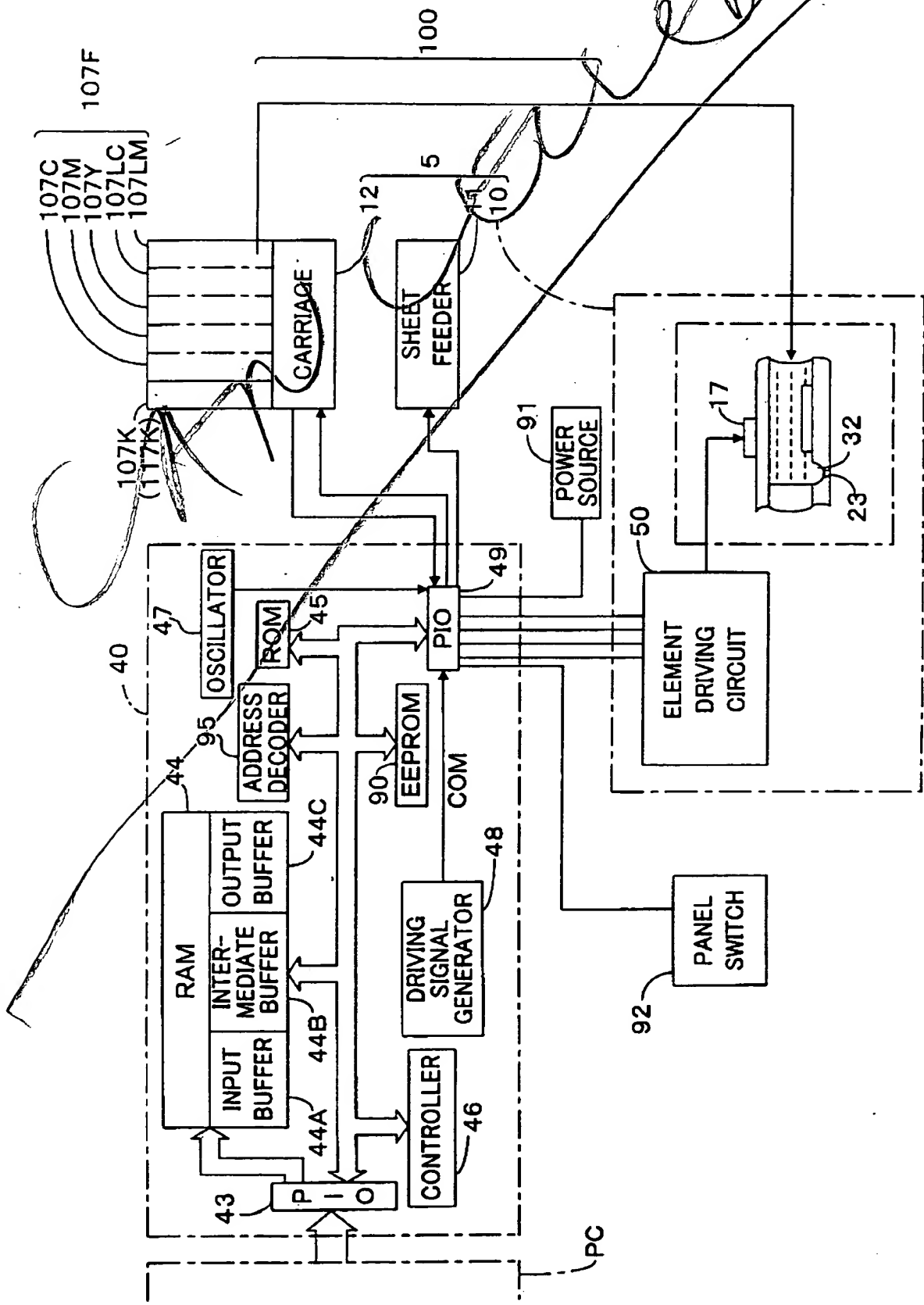


Fig. 2



66207F" 2/22/86

Fig. 3

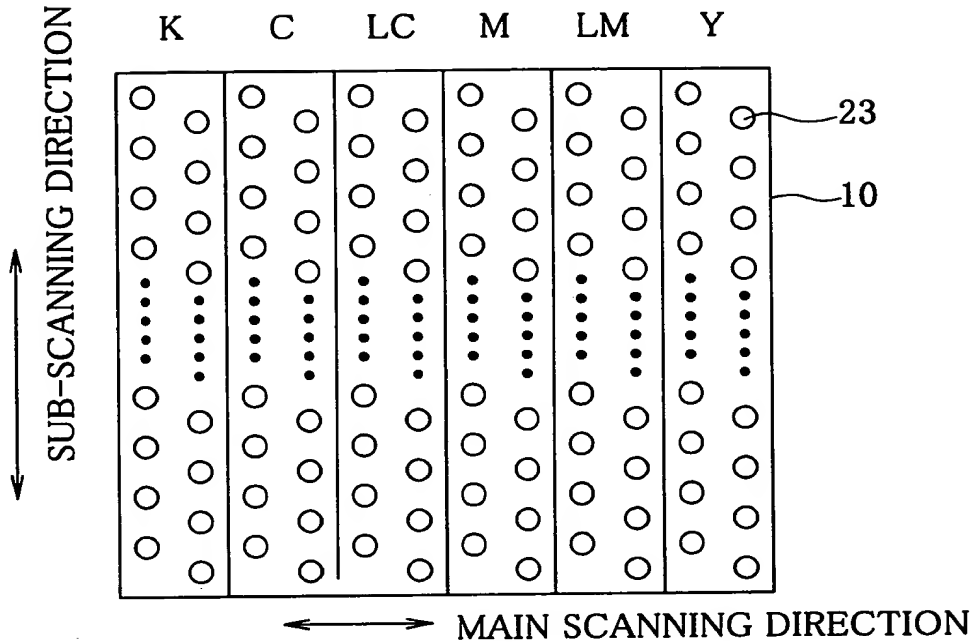


Fig. 4A

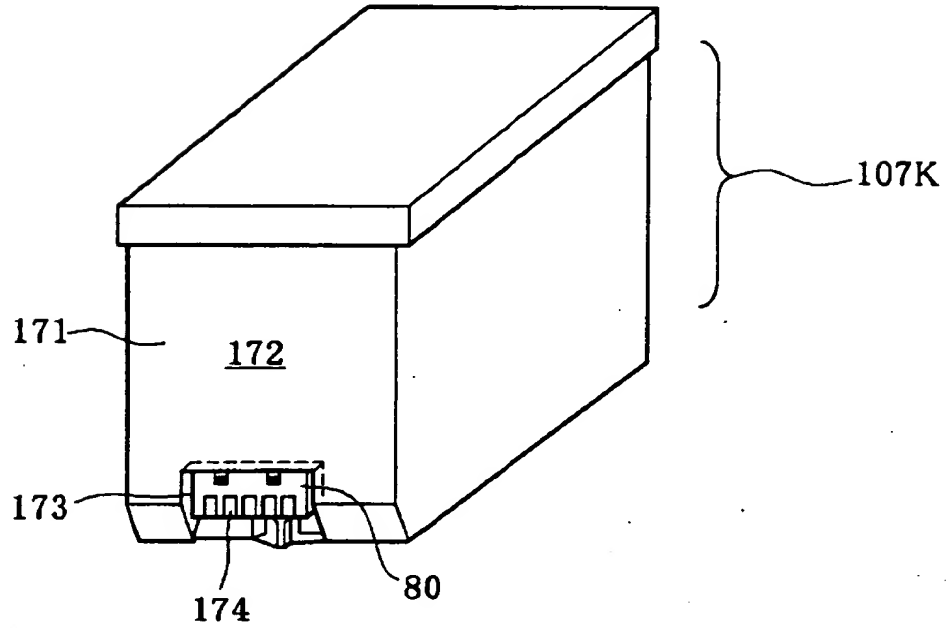
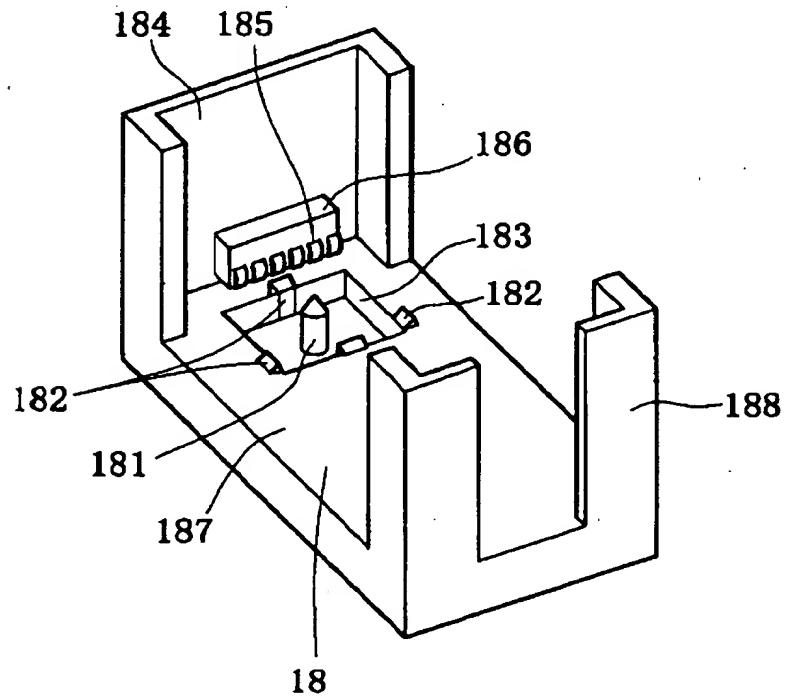
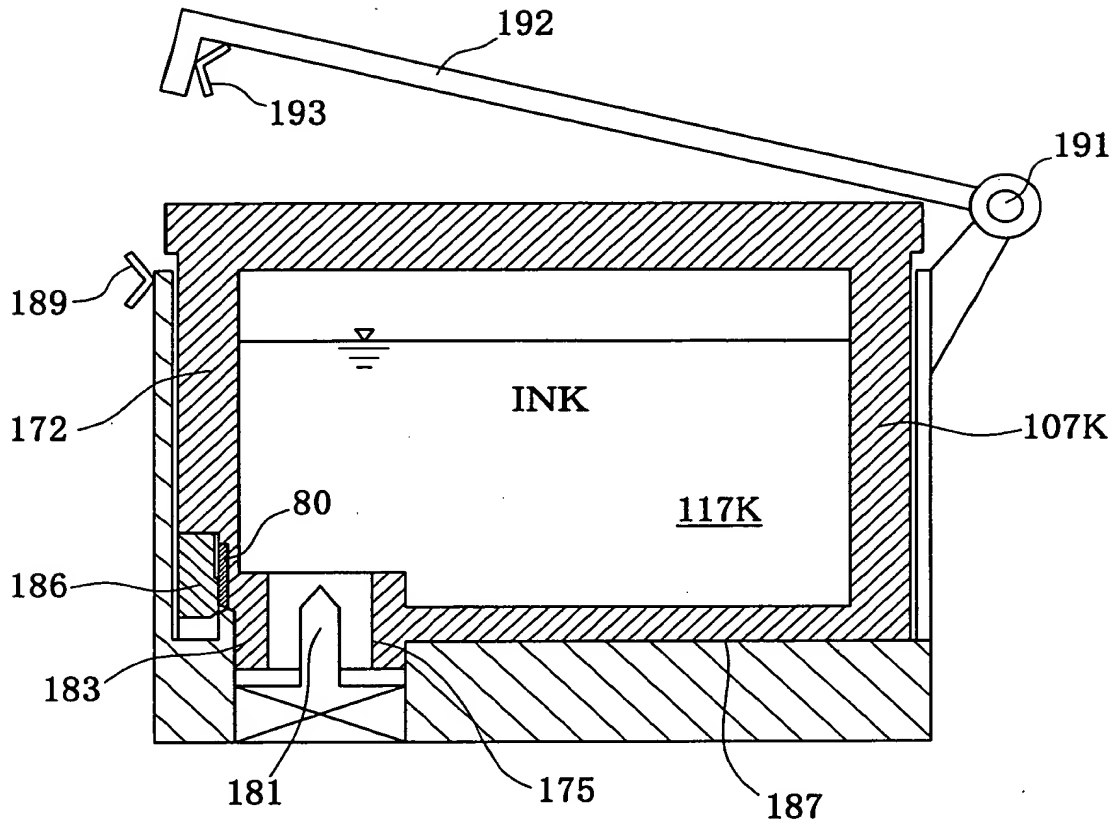


Fig. 4B



662077-2222450

Fig. 5


004227-1020
"DOT" 2226460

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

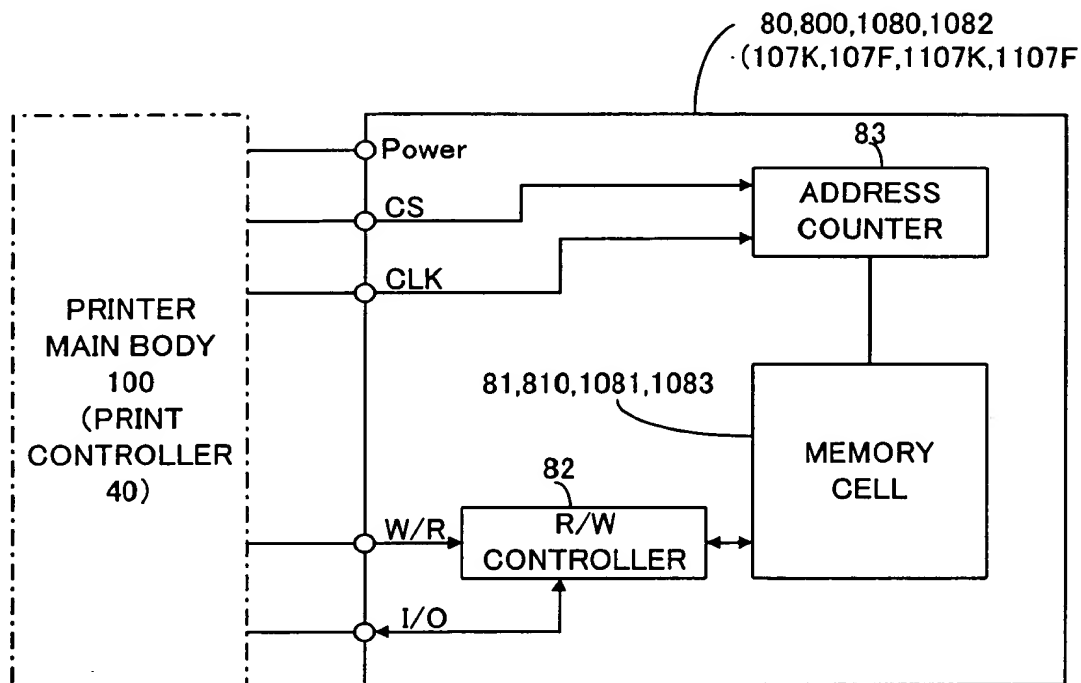


Fig.6

662077-2/222E460

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

OBLON ET AL (703) 413-3000

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80, 107K
↙

	Contents of Information	
701	1 st Data on remaining quantity of black ink	760
702	2 nd Data on remaining quantity of black ink	
711	Data on unsealed time (year)	750
712	Data on unsealed time (month)	
713	Version data of ink cartridge	
714	Data on type of ink	
715	Data on year of manufacture	
716	Data on month of manufacture	
717	Data on date of manufacture	
718	Data on production line	
719	Serial number data	
720	Data on recycle	

Fig. 7

094227.1093
662011 2226460

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

80, 107F

	Contents of Information	
601	1 st Data on remaining quantity of cyan ink	660
602	2 nd Data on remaining quantity of cyan ink	
603	1 st Data on remaining quantity of magenta ink	
604	2 nd Data on remaining quantity of magenta ink	
605	1 st Data on remaining quantity of yellow ink	
606	2 nd Data on remaining quantity of yellow ink	
607	1 st Data on remaining quantity of light cyan ink	
608	2 nd Data on remaining quantity of light cyan ink	
609	1 st Data on remaining quantity of light magenta ink	
610	2 nd Data on remaining quantity of light magenta ink	
611	Data on unsealed time (year)	650
612	Data on unsealed time (month)	
613	Version data of ink cartridge	
614	Data on type of ink	
615	Data on year of manufacture	
616	Data on month of manufacture	
617	Data on date of manufacture	
618	Data on production line	
619	Serial number data	
620	Data on recycle	

Fig. 8

004227-1030

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

	Contents of Information
901	Data on remaining quantity of black ink
902	Data on unsealed time (year)
903	Data on unsealed time (month)
904	Version data of ink cartridge
905	Data on type of ink
906	Data on year of manufacture
907	Data on month of manufacture
908	Data on date of manufacture
909	Data on production line
910	Serial number data
911	Data on recycle
921	Data on remaining quantity of cyan ink
922	Data on remaining quantity of magenta ink
923	Data on remaining quantity of yellow ink
924	Data on remaining quantity of light cyan ink
925	Data on remaining quantity of light magenta ink
926	Data on unsealed time (year)
927	Data on unsealed time (month)
928	Version data of ink cartridge
929	Data on type of ink
930	Data on year of manufacture
931	Data on month of manufacture
932	Data on date of manufacture
933	Data on production line
934	Serial number data
935	Data on recycle

90, 100
↙

Fig. 9

0044227.1029
662077 222460

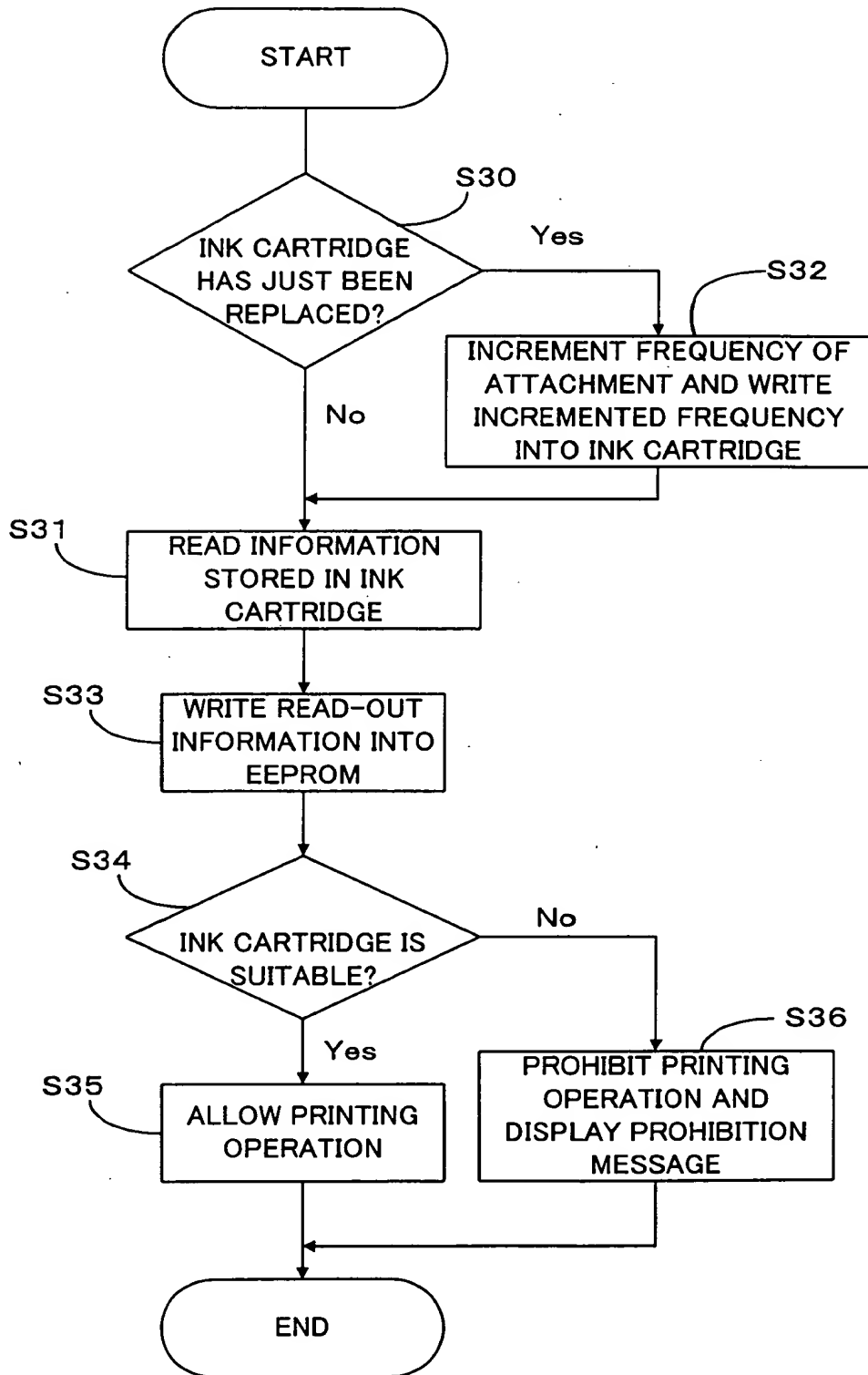


Fig. 10

09432272 "10299

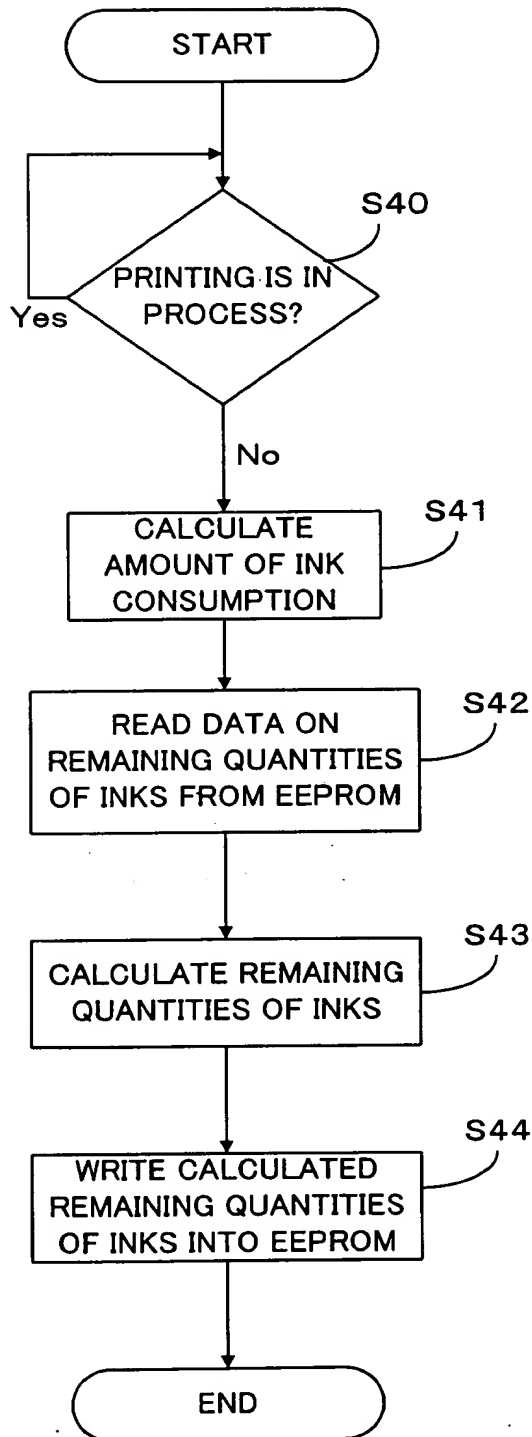


Fig. 11

0943227 " 1099 662071" 222E460

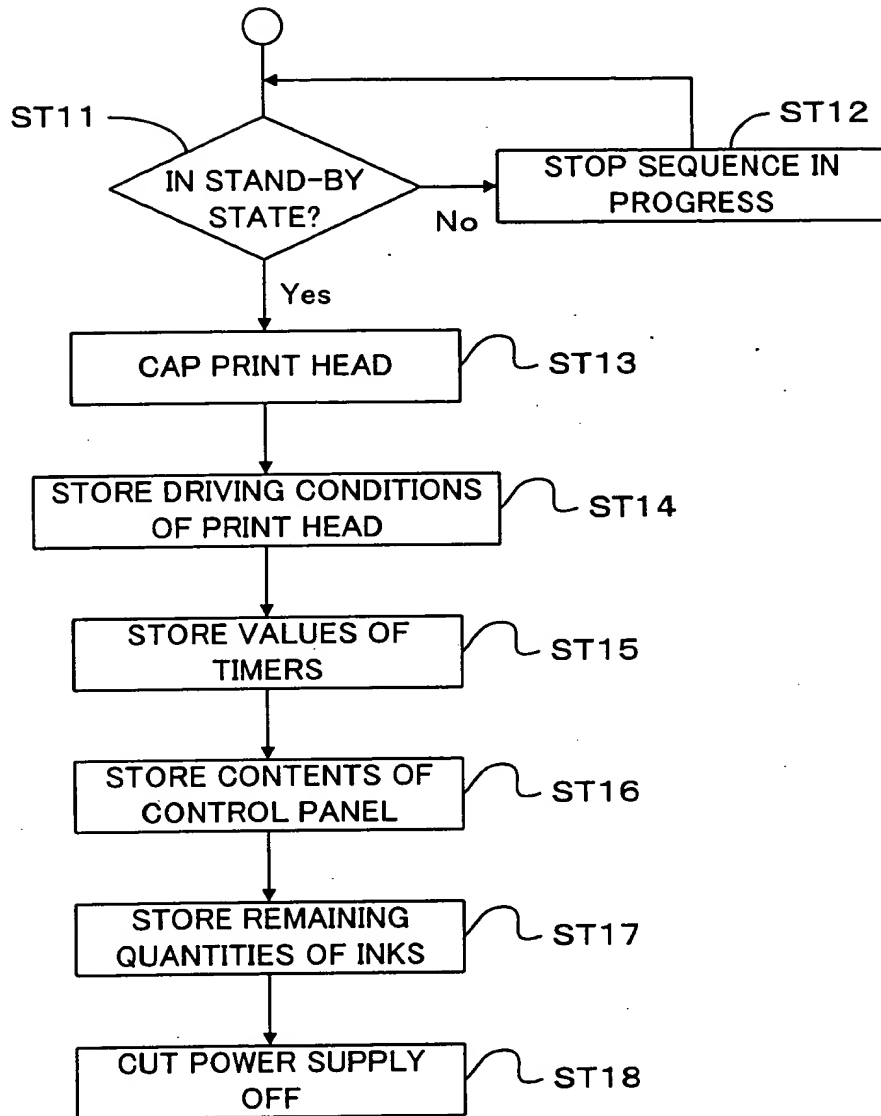


Fig. 12

0943227.109
662077 2222450

Fig. 13A
 WRITING PROCESS FOR
 REMAINING QUANTITIES OF
 INKS

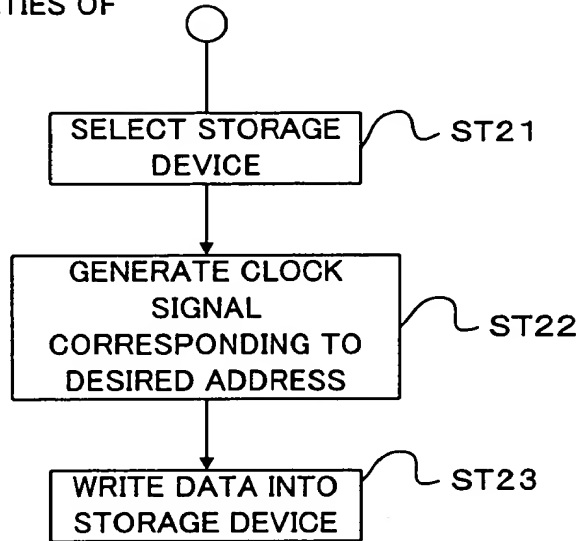
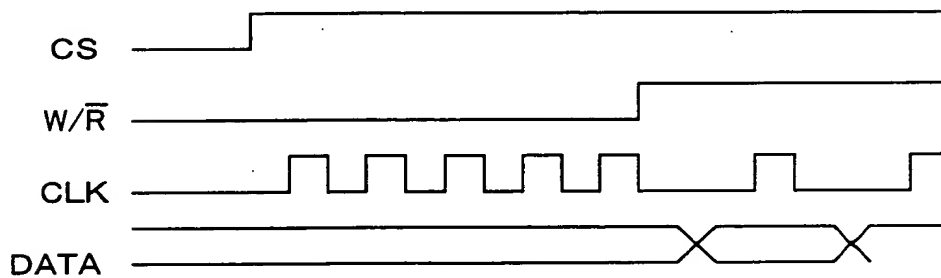


Fig. 13B



004227.10290

Fig. 14A

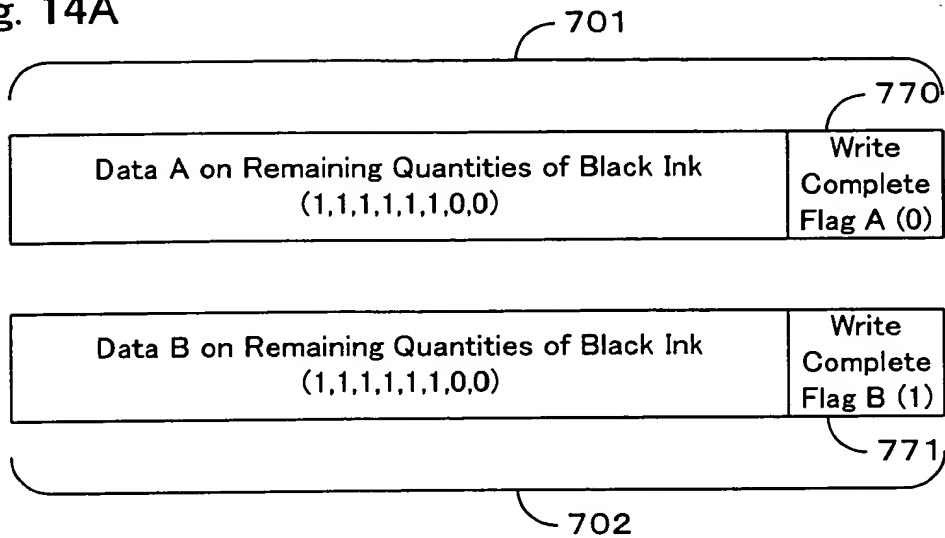


Fig. 14B

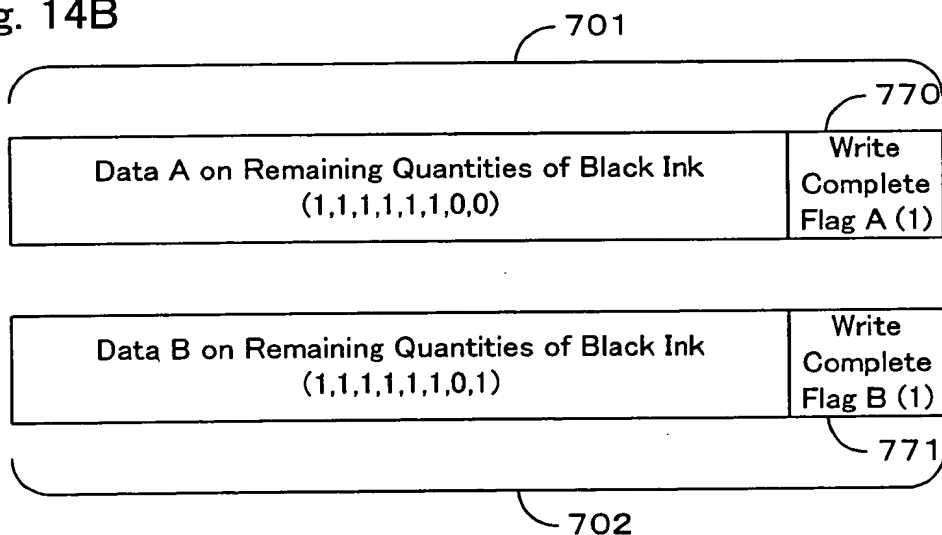
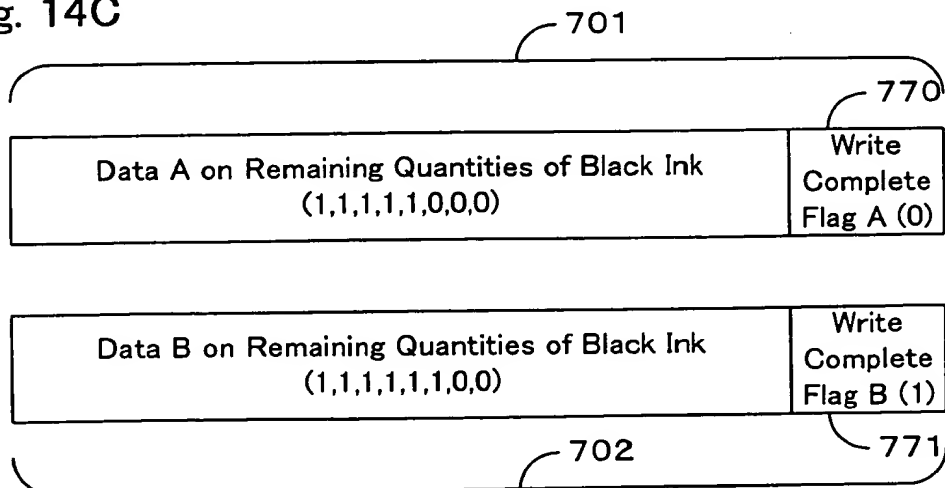


Fig. 14C



662077-2226460

Fig. 15A

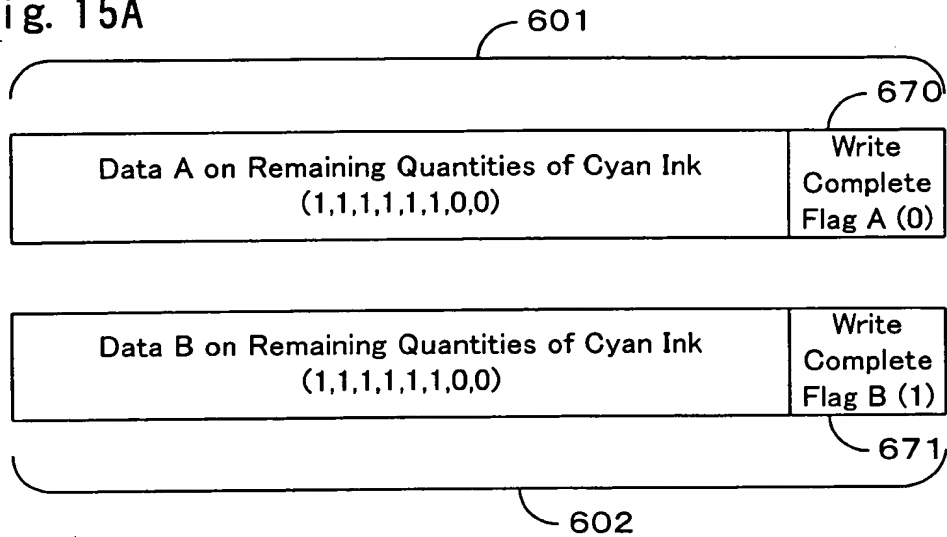


Fig. 15B

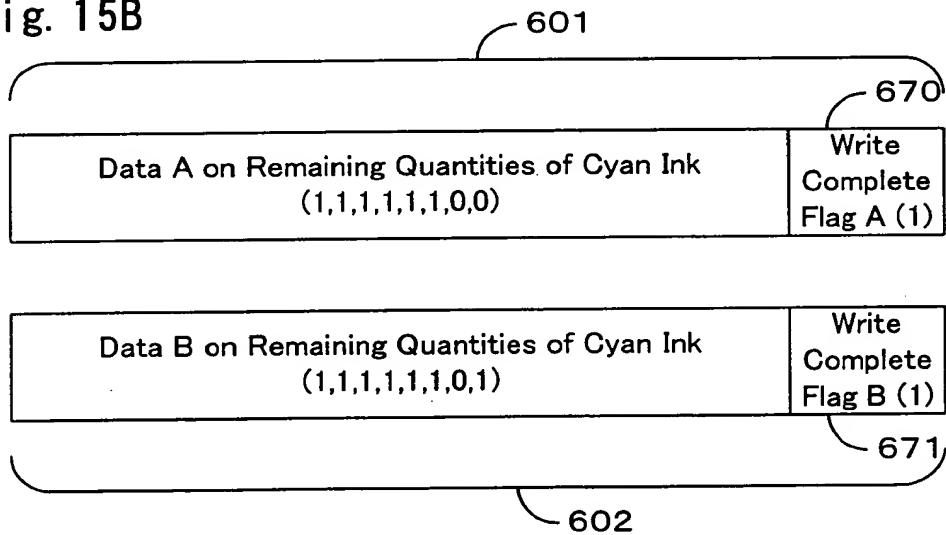
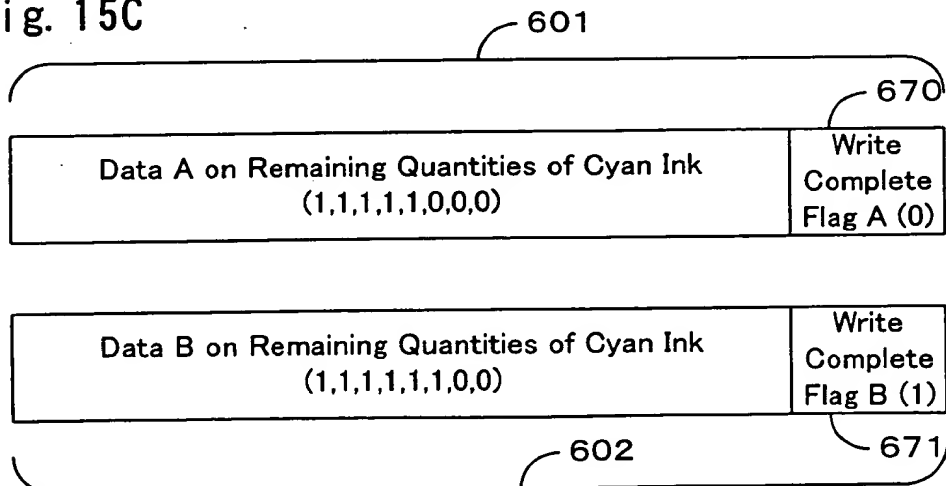


Fig. 15C



0043227 110299

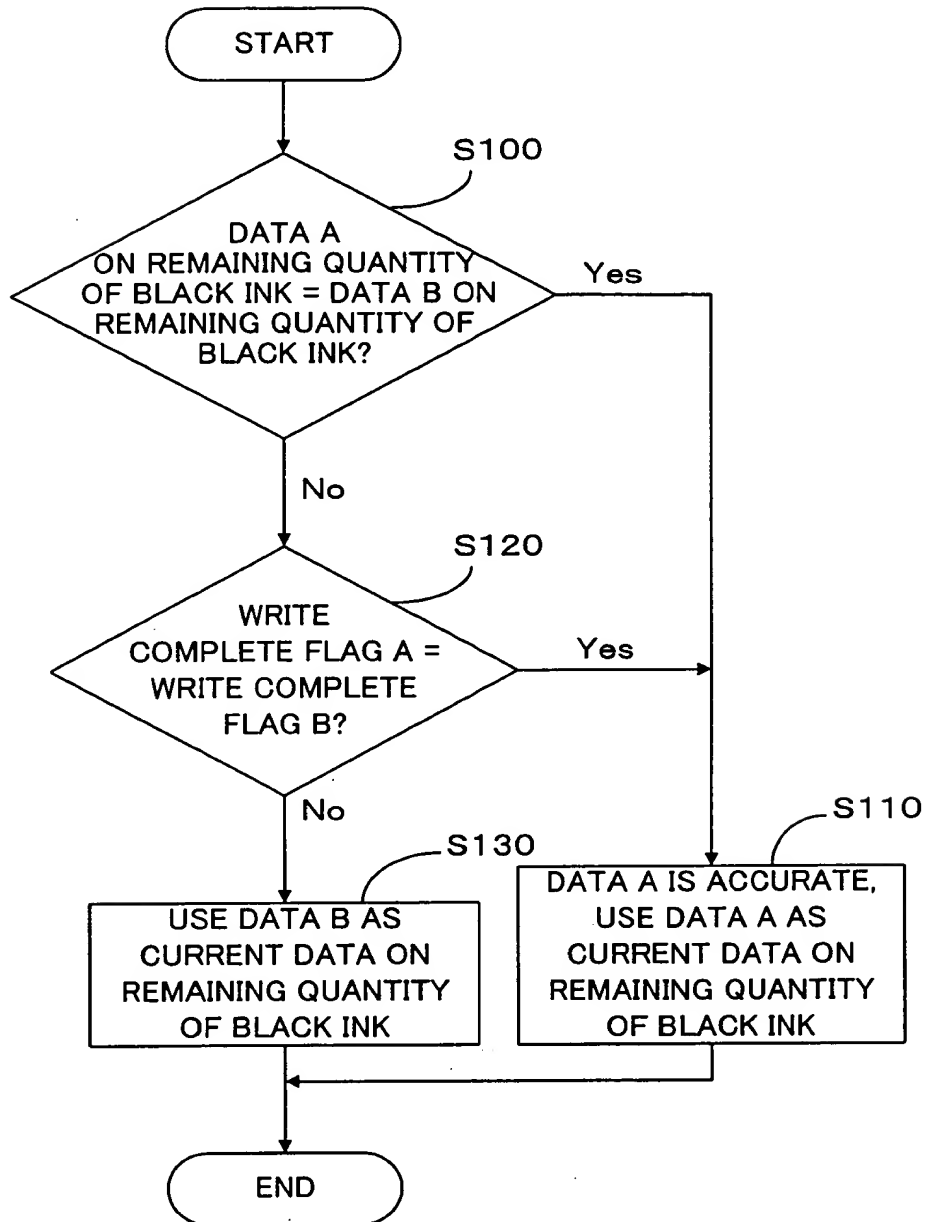


Fig.16

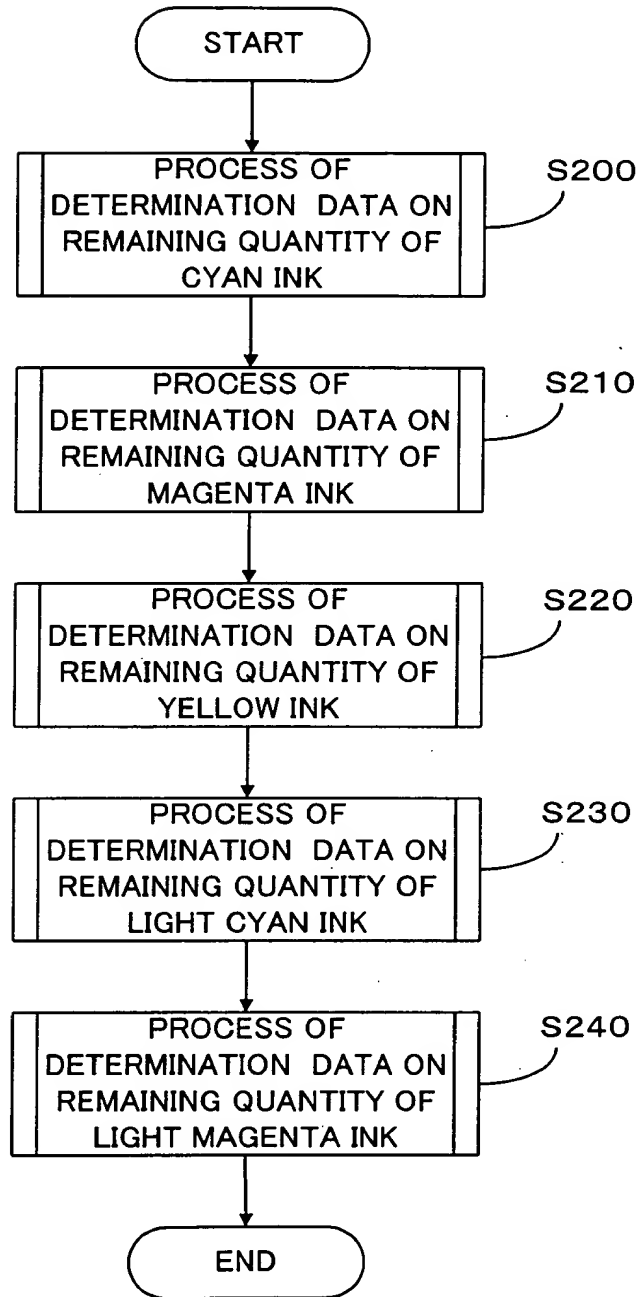


Fig. 17

662071 2/22/16

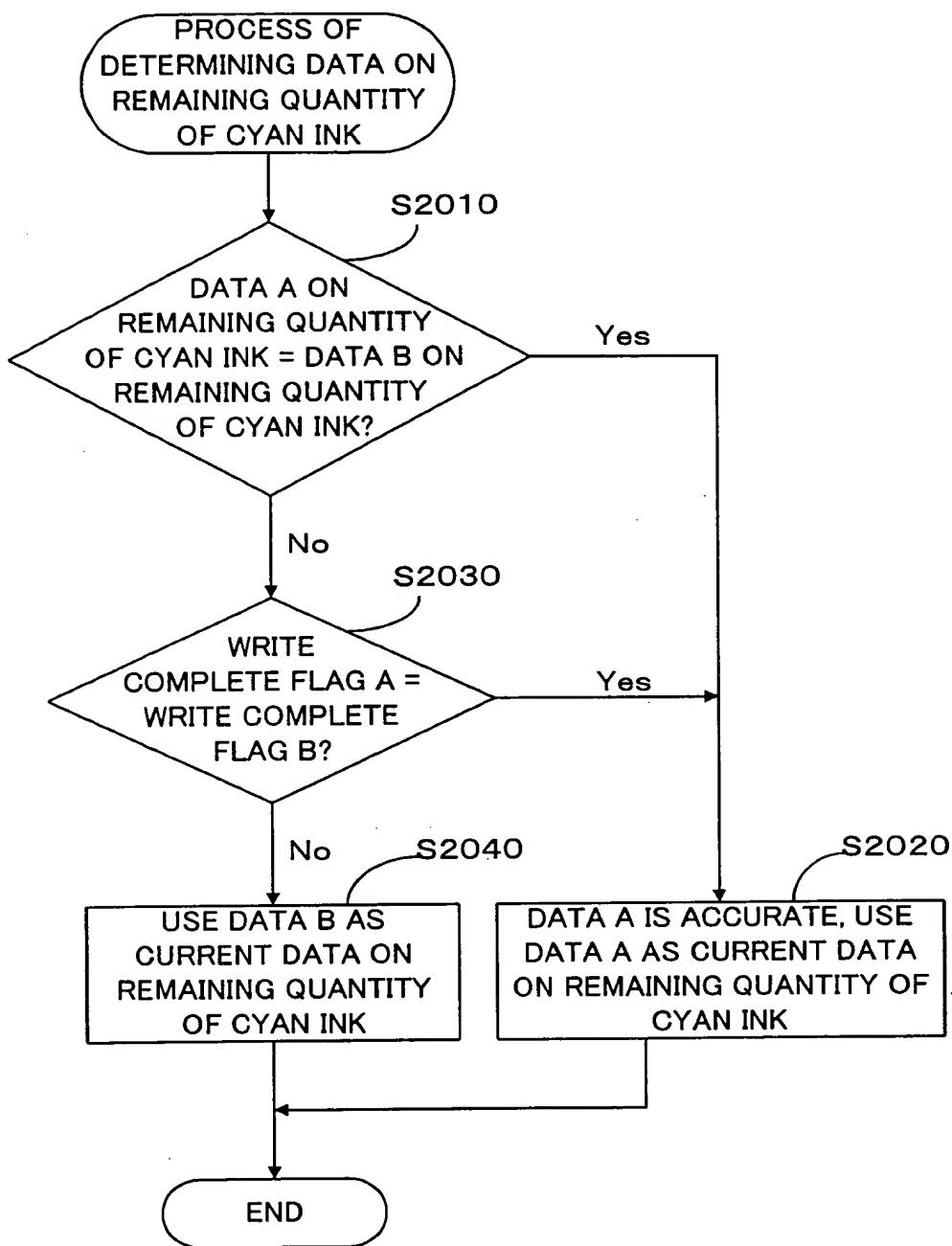


Fig.18

0042271020

	Contents of Information	
801	1 st Data on remaining quantity of cyan ink	800 (810)
802	1 st Data on remaining quantity of magenta ink	
803	1 st Data on remaining quantity of yellow ink	
804	1 st Data on remaining quantity of light cyan ink	
805	1 st Data on remaining quantity of light magenta ink	
870	Write complete flag A	860
806	2 nd Data on remaining quantity of cyan ink	
807	2 nd Data on remaining quantity of magenta ink	
808	2 nd Data on remaining quantity of yellow ink	
809	2 nd Data on remaining quantity of light cyan ink	
810	2 nd Data on remaining quantity of light magenta ink	850
871	Write complete flag B	
811	Data on unsealed time (year)	
812	Data on unsealed time (month)	
813	Version data of ink cartridge	
814	Data on type of ink	
815	Data on year of manufacture	
816	Data on month of manufacture	
817	Data on date of manufacture	
818	Data on production line	
819	Serial number data	
920	Data on recycle	

Fig. 19

0943227 110299

Fig.20A

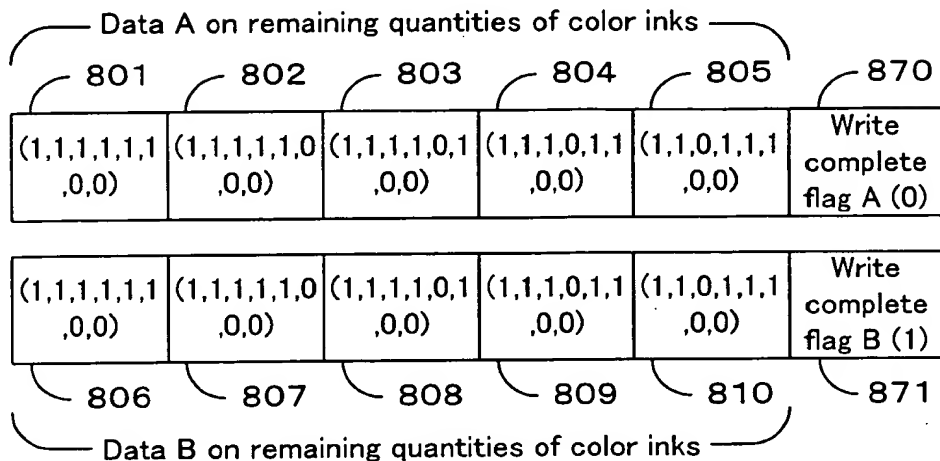


Fig.20B

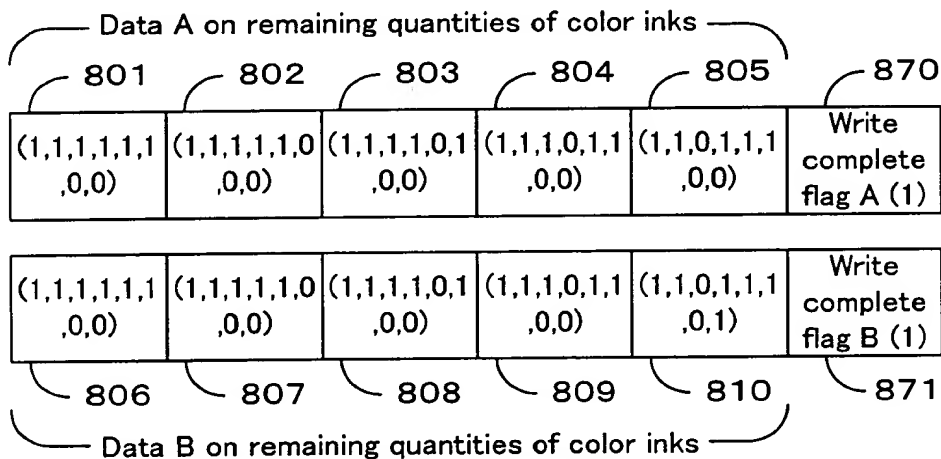
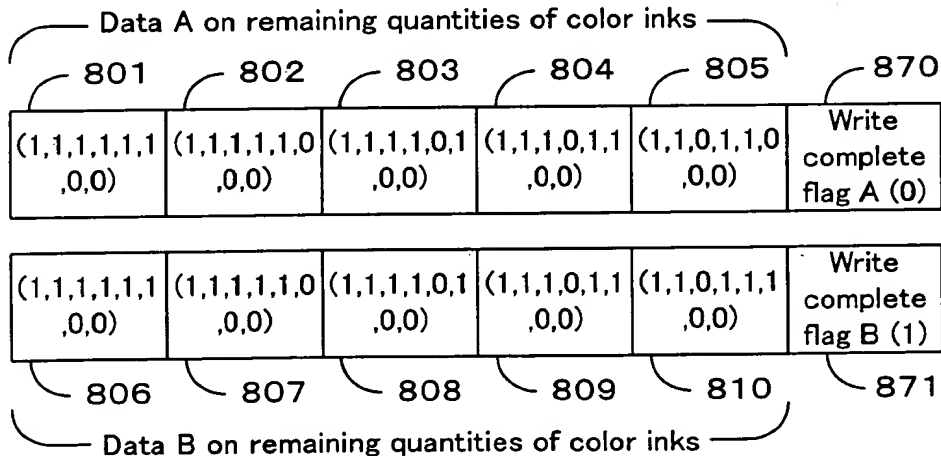
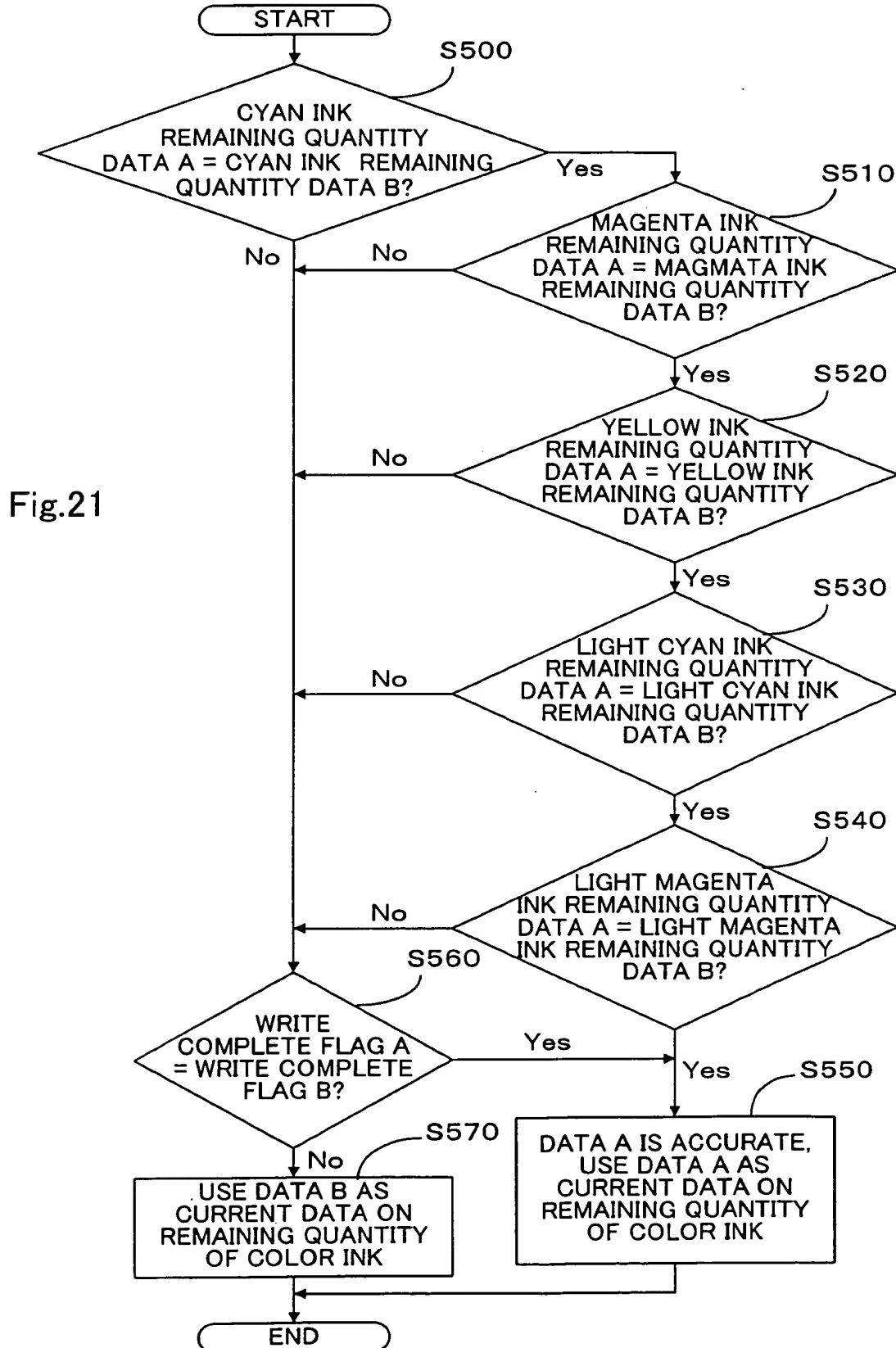


Fig.20C



00447-0086-2 SHEET 20 OF 3



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

OBLON ET AL (703) 413-3000

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Address of Control IC 200	Data Length (byte)	Items of Information	Address of Storage Element 1080	Capacity (bit) in Storage Element
00	1	Remaining quantity of black ink	00	8
01	1	Frequency of cleaning	08	8
02	1	Frequency of attachment	10	8
03	2	Total time period of attachment	18	16
05	1	Year of manufacture	28	7
06	1	Month of manufacture	2F	4
07	1	Date of manufacture	33	5
08	1	Hour of manufacture	38	5
09	1	Minute of manufacture	3D	6
0A	1	Production serial No.	43	8
0B	1	Frequency of recycle	4B	3
0C	2	Ink cartridge name	4E	10
0E	1	Ink type	58	8
0F	1	Term of validity	60	6
10	1	Term of validity after unsealed	66	5

Fig.22

09432272.10293

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

OBLON ET AL (703) 413-3000

DOCKET # 4947-0080-2 SHEET 23 OF 31

Address of Control IC 200	Data Length (byte)	Items of Information	Address of Storage Element 1082	Capacity (bit) in Storage Element
20	1	Remaining quantity of cyan ink	00	8
21	1	Remaining quantity of magenta ink	08	8
22	1	Remaining quantity of yellow ink	10	8
23	1	Remaining quantity of light cyan ink	18	8
24	1	Remaining quantity of light magenta	20	8
25	1	Frequency of cleaning	28	8
26	1	Frequency of attachment	30	8
27	2	Total time period of attachment	38	16
29	1	Year of manufacture	48	7
2A	1	Month of manufacture	4F	4
2B	1	Date of manufacture	53	5
2C	1	Hour of manufacture	58	5
2D	1	Minute of manufacture	5D	6
2E	1	Production serial No.	63	8
2F	1	Frequency of recycle	6B	3
30	2	Ink cartridge name	6E	10
32	1	Ink type	78	8
33	1	Term of validity	80	6
34	1	Term of validity after unsealed	86	5

Fig. 23

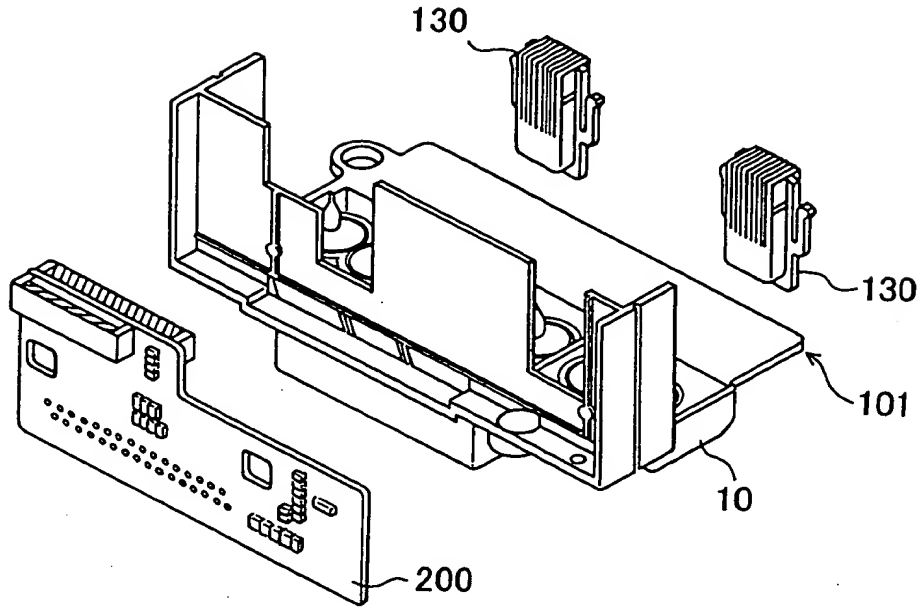
0443227.1029

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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F i g . 2 4



662077-222E460

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APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

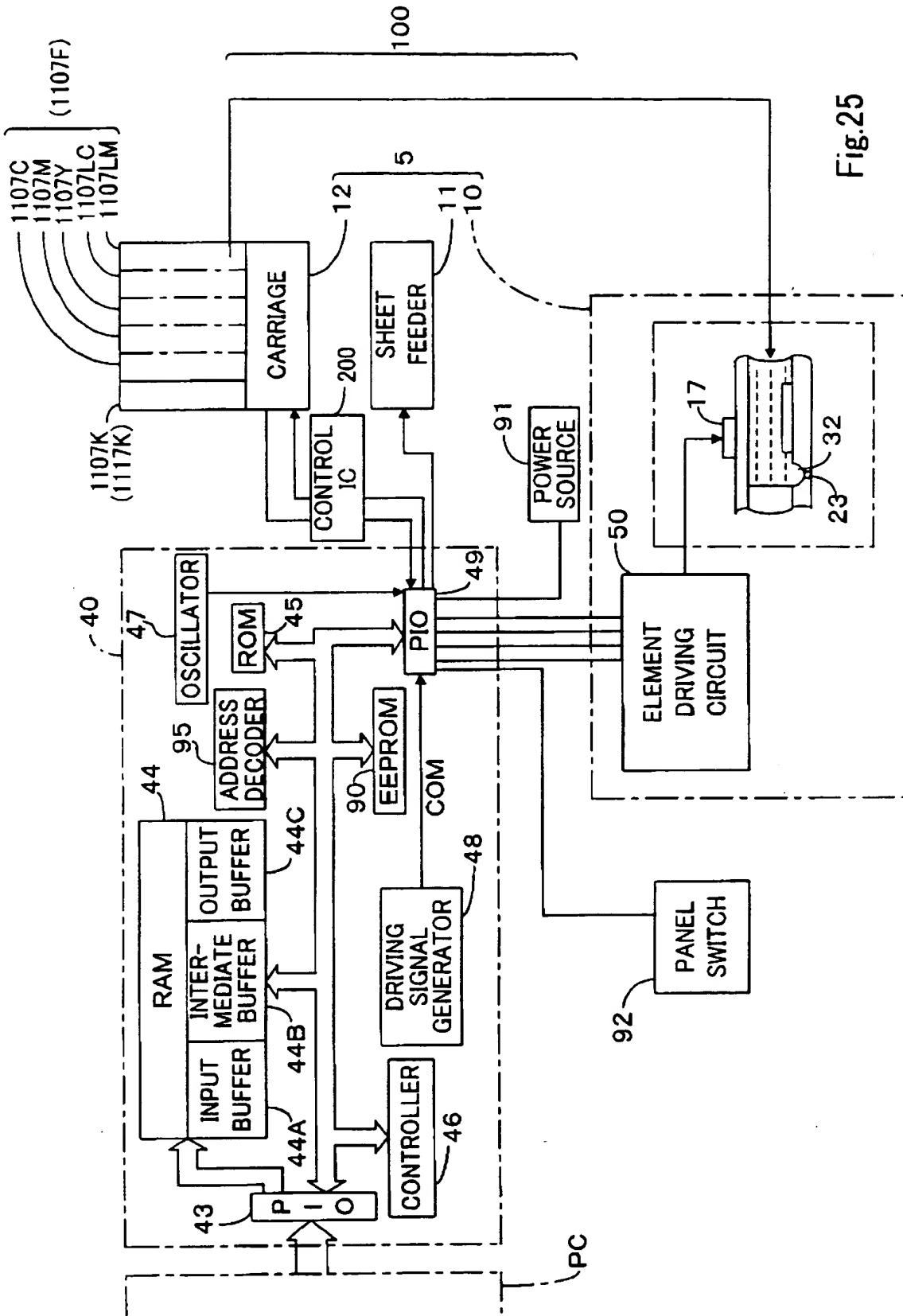


Fig. 25

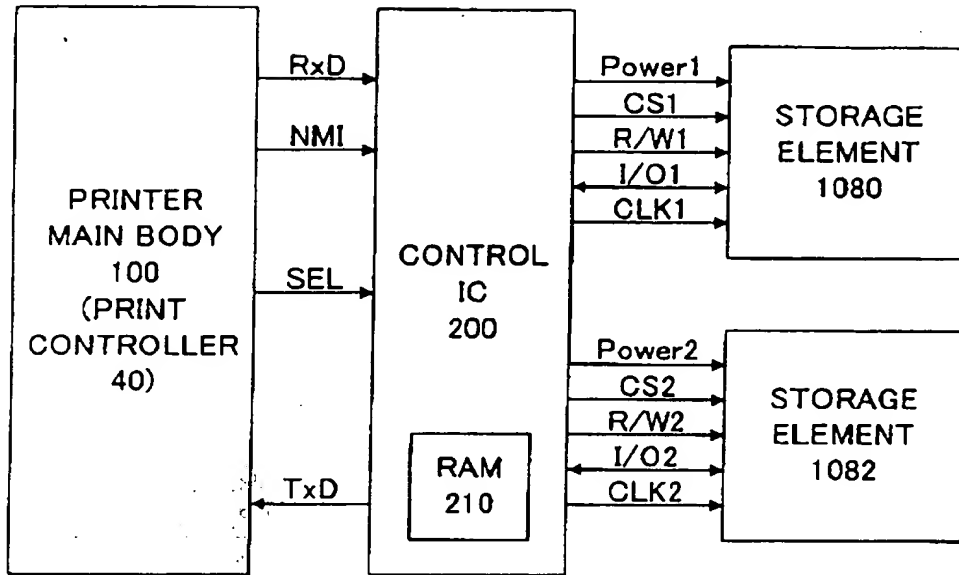
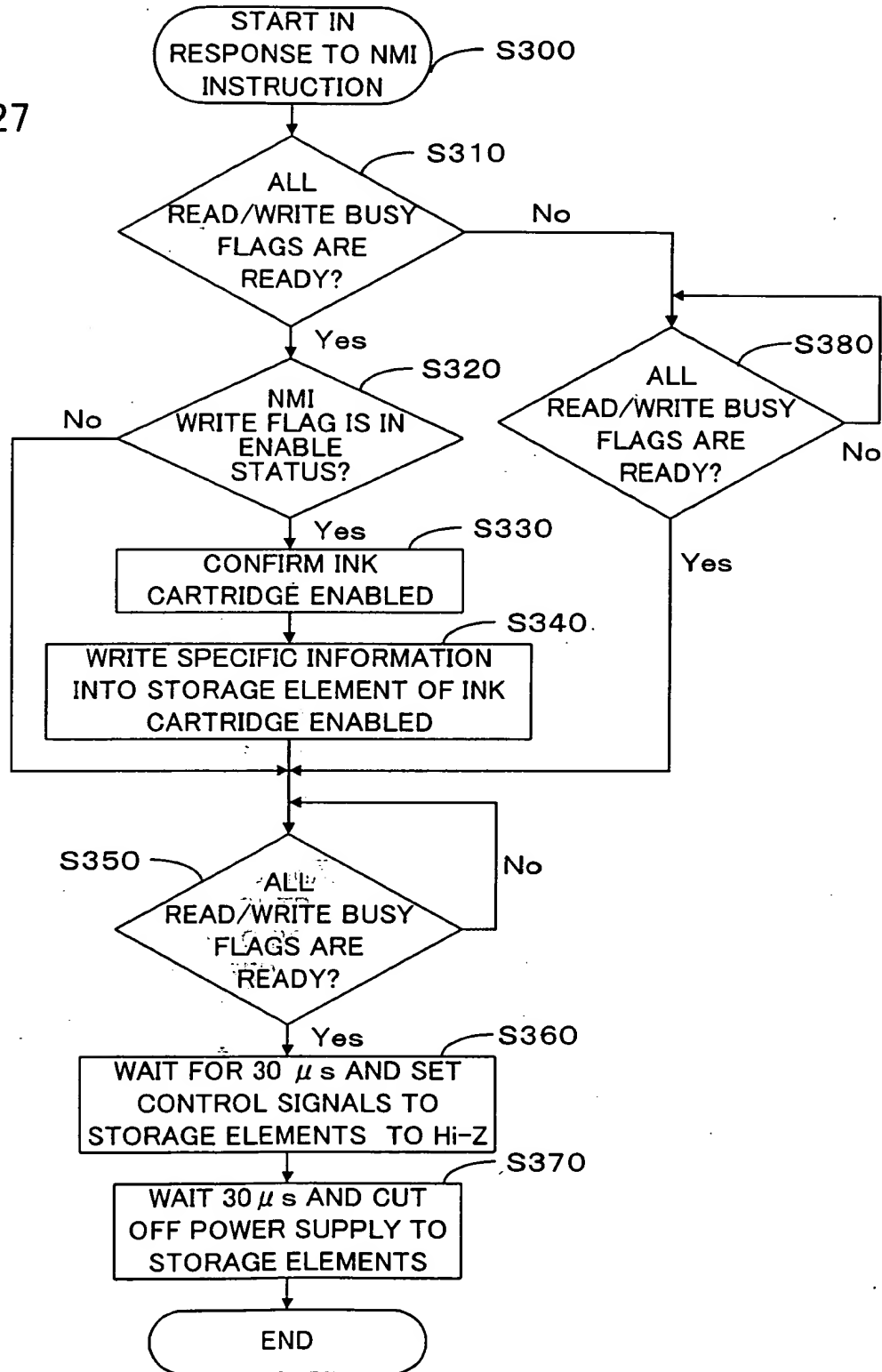


Fig.26

0443227 2/22/86

Fig.27



004327 222460

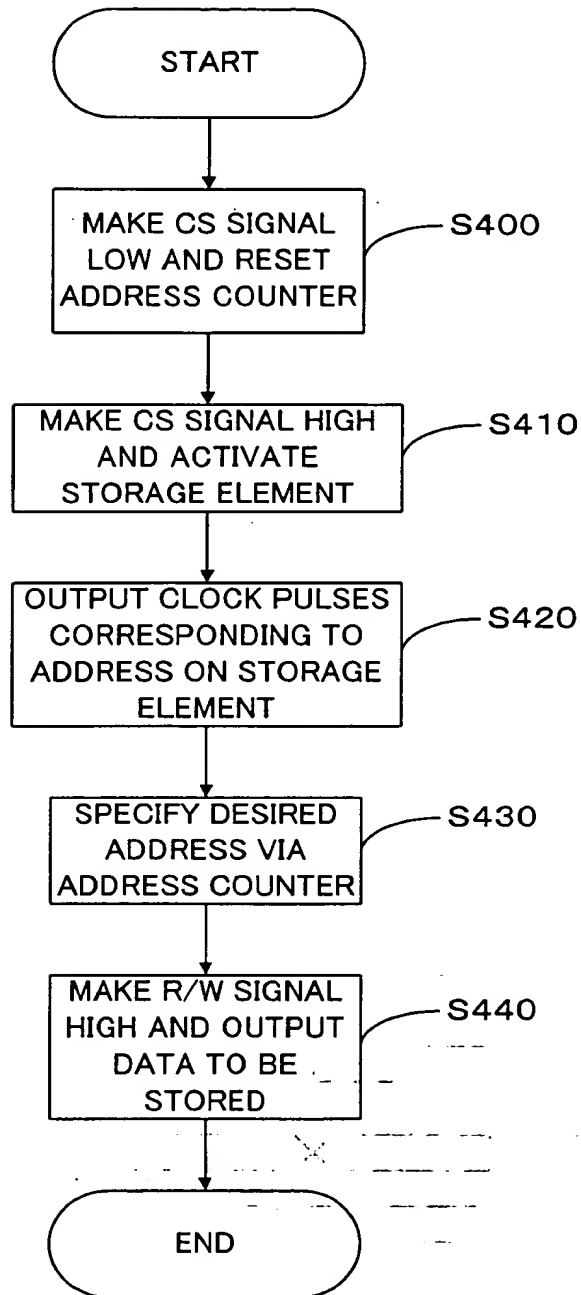


Fig.28

APPROVED	CLASS	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig.29

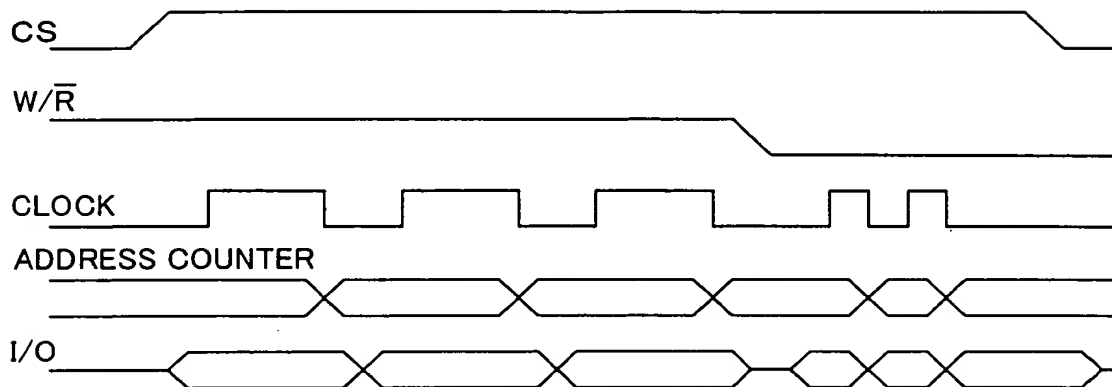
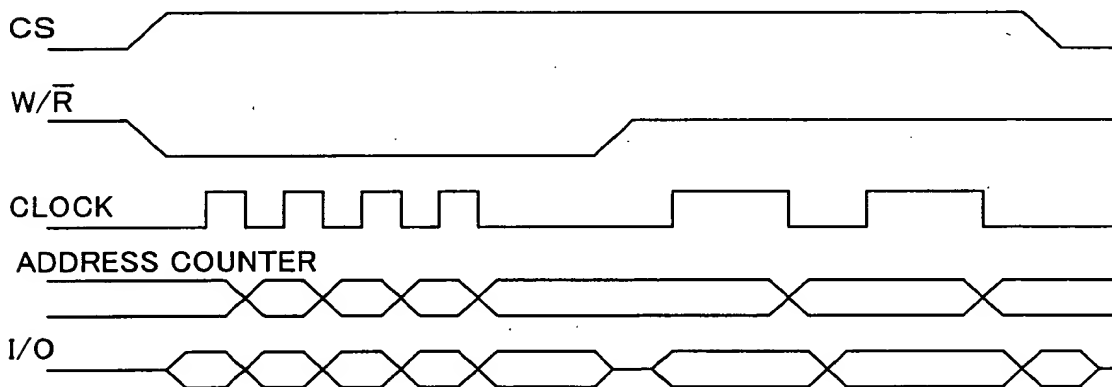


Fig.30



652071-2/22E460

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

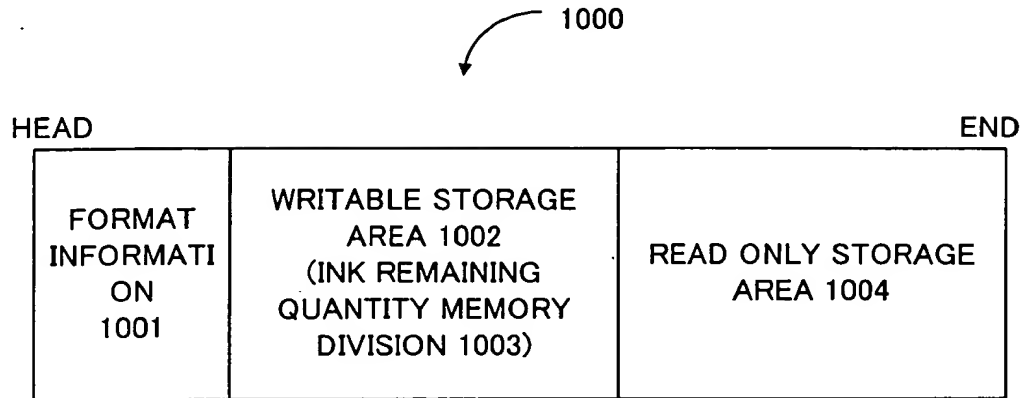


Fig.31

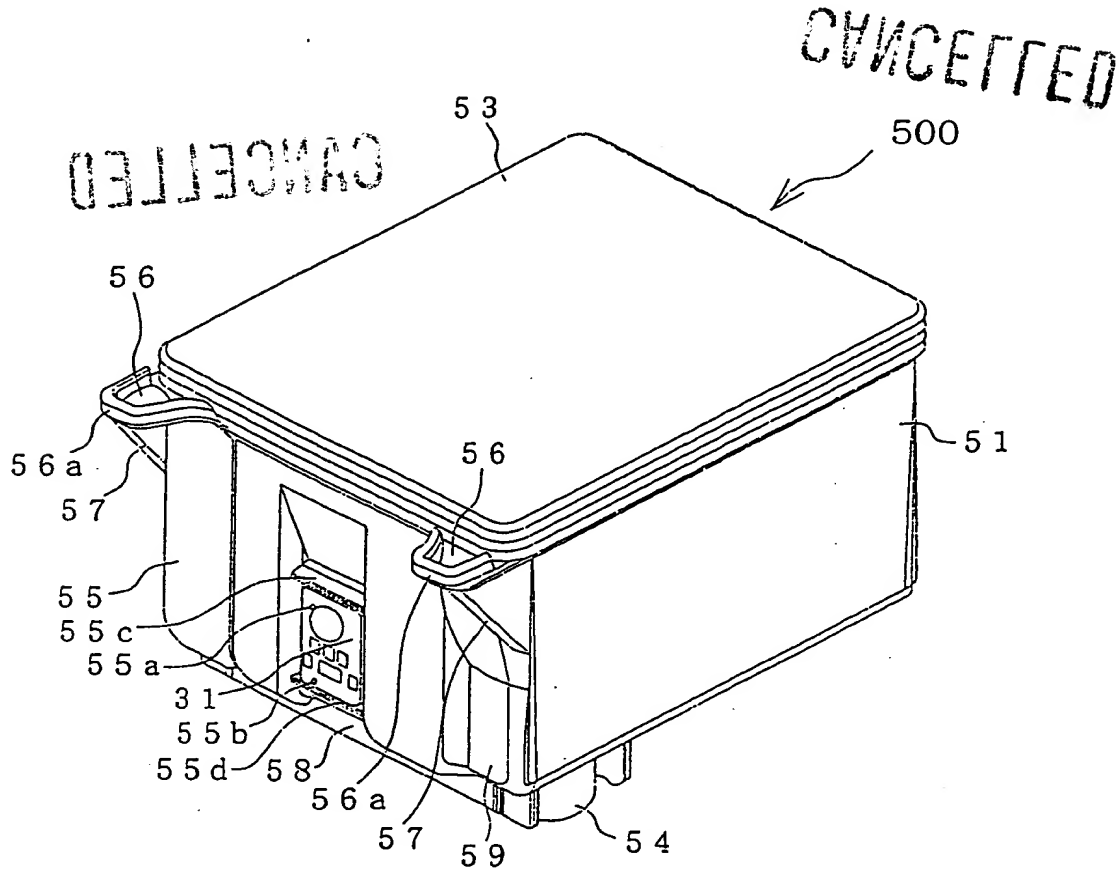
662077 2/22/86

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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Fig. 32



0042272 110290